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States Government

Memorandum

JAN 21 1991

ERD:BKT:0321

Comments on Draft NEPA/CERCLA Integration Strategy Attached to EG&G Memorandum
JMK-0962-91, Dated December 13, 1991

J. M. Kersh, Associate General Manager
Environmental Restoration and Waste Management
EG&G Rocky Flats, Inc.

ADMIN RECORD

Transmitted herewith are DOE/RFO comments on the EG&G Draft NEPA/CERCLA
Integration Strategy. You should note that the EG&G's NEPA Division has ignored many
DOE comments contained in DOE/RFO memorandum ERD:BKT:1706 to Laura Frick,
EG&G, dated April 4, 1991.

We request that the strategy document be modified per DOE comments and that responses
to comments be prepared. Both the revised document and responses to comments shall be
submitted to DOE/RFO/ERD by February 7, 1992. A meeting to discuss the comments
will be scheduled for sometime in mid-January, 1992. We request that your NEPA
Division staff contact Bruce Thatcher of my staff at ext. 3532 to set up this meeting once
the comments have been reviewed.

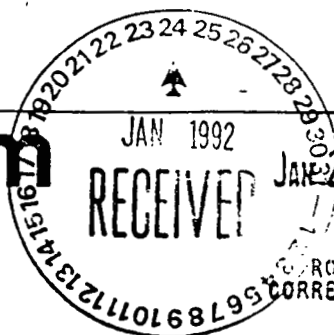
David P. Simonson
David P. Simonson
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Attachment

cc w/Attachment:
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R. Schassburger, ERD, DOE
B. Thatcher, ERD, DOE
P. Powell, ERD, DOE
S. Nesta, EG&G
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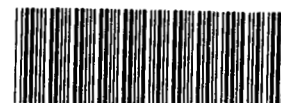
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GENERAL COMMENTS

- 1) DOE Order 5400.4 (7) (e) states that RI/FS-EA documents must be prepared no later than the conclusion of the feasibility study initial screening step in order to determine whether a RI/FS-EIS will be required. The document needs to state this and discuss potential impacts on the NEPA/CERCLA intergration process. As an example, the NCP 300.430 (e) (7) states that the criteria of effectiveness, implementability and cost will be used to guide the development and screening of remedial alternatives. Thus, the nine criteria in the NCP 300.430 (e) (9) (iii) will not be contained in the RI/FS-EA sent to DOE headquarters for review. Is this EG&G/RFs interpretation? In any case, you will need to discuss the impact of this portion of DOE Order 5400.4 on the NEPA/CERCLA integration process.
- 2) Utilize information from the ORNL document entitled "Integrating NEPA and CERCLA During Remedial Responses at DOE Facilities (ORNL/TM-11564)" dated July, 1990. This document contains an excellent discussion of an integrated RI/FS-EIS report. Although this document stresses an EIS, many of the concepts also apply to an EA. Additional references include "DOE's Hazardous Waste Activities and Compliance with NEPA", Federal Facilities Environmental Journal/Vol. 1, No. 4/Winter 1990/1991 (p. 391-409), "Successful Integration of the CERCLA and NEPA Compliance Processes in the Weldon Spring Site Remedial Action Project: A Case Study", Environmental Restoration '91, 1991 Department of Energy Environmental Restoration Conference, September 8-11, 1991, Pasco, Washington (p. 615-619), and Taking Interim Actions: Integrating CERCLA and NEPA to Move Ahead with Site Cleanup", Environmental Restoration '91 ... (p. 623-626). The bottom line is that there have been several articles published regarding NEPA/CERCLA integration. EG&G/RFs failure to search and report on the existing literature is unprofessional. Further, by ignoring the existing literature, EG&G/RF is in a position of "reinventing the wheel" which is a waste of federal dollars.
- 3) This document should contain generic outlines for both RI/FS-RFI/CMS-EA and RI/FS-RFI/CMS-EIS reports as requested in my memorandum dated April 4, 1991. Note that the ORNL document previously referenced contains such an outline for a RI/FS-EIS report.
- 4) This document is entitled "NEPA Integration Into the IAG"; however, this document does not do this other than by lip service. The IAG integrates the requirements of RCRA and CERCLA. DOE Order 5400.4 requires the integration of NEPA and CERCLA. Thus, this document should integrate NEPA, CERCLA and RCRA even though the DOE Order does not address NEPA/RCRA integration. This document stresses the integration of NEPA and CERCLA without proper consideration of RCRA (see Section 4).

LOCATION

SPECIFIC COMMENTS

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|------------------------------|--|
| p. 2, Sec. 1, 1st sentence | DOE Order 5400.4 requires the integration of NEPA and CERCLA, but does not address RCRA. Revise to reflect this fact. |
| p. 2, Sec. 1, par. 1 | Add a sentence stating that the IAG integrates CERCLA and RCRA and, therefore, this document will integrate NEPA, CERCLA and RCRA. |
| p. 2, Sec. 1, par. 2, line 2 | Insert "IAG" before "documents".
Insert "the NCP" after "CERCLA". |

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p. 3, Sec. 3, par. 1,
line 9

Delete all references to the worst-case scenario. Neither NEPA, CERCLA nor RCRA require consideration of the worst-case scenario. Note that under CERCLA, the reasonable maximum exposure (RME) is used in the baseline risk assessment. Contact D. Smith, EG&G/RF, ext. 5958, regarding the RME concept, if necessary.

p. 3, Sec. 3, par. 3,
1st sentence.

What about the IM/IRA at OU 4?

p. 3, Sec. 3, par. 3,
line 9

Replace "EPA and CDH comments" with "DOE comments".

p. 4, Sec. 4

Revise to indicate integration of NEPA, CERCLA and RCRA.

DOE Order 5400.4 (7) (d) states that a key element of the integrated process is to ensure that RI/FS-NEPA planning is achieved early in the process. 40CFR1500.2 and 40CFR 1501.2(a) discuss integrating requirements of NEPA with other planning and early planning, respectively. Thus, NEPA should be an integral part of the CERCLA and RCRA scoping process. Section 4 should be expanded to include planning and scoping activities required by NEPA, CERCLA (NCP 300.430 (b)) and RCRA.

p. 4, Sec. 4.1

Interim actions are required to protect human health and the environment and/or to prevent the migration of contamination. Revise the text accordingly.

Interim actions must also be consistent with the final remedy. Revise the text accordingly.

p. 4, Sec. 4.1.1, par. 2

The NCP 300.430 (e) (9) (iii) specifies nine criteria for detailed analysis of alternatives, while the NCP 300.430 (e) (7) specifies three criteria (effectiveness, implementability and cost) for development and screening of alternatives. An EPA document entitled "Guidance on Remedial Actions for Contaminated Ground Water at Superfund Sites (EPA/540/G-88/003)" in Appendix C that the nine criteria shall be used for interim remedial action. Revise the text accordingly.

List the NEPA criteria comprising environmental impact.

p. 4, Sec. 4.1.1, par. 3

Replace "IRAP makes the document an IRAP/EA" by "IRAP/IM results in an IRAP/IM/EA".

p. 4, Sec. 4.2.1, par. 2

Analysis of impacts on wetland/floodplains is required by 10CFR1022, not NEPA. Revise the text accordingly.

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The Endangered Species Act, Migratory Bird Treaty Act, Fish and Wildlife Coordination Act, National Historic Preservation Act, Archaeological and Historic Preservation Act are all ARARs under CERCLA. Most of these acts are listed in "CERCLA Compliance with Other Laws Manual: Part II (EPA/540/G-89/009)" otherwise known as the ARARs manual. Thus, these statutes are also of importance to the CERCLA process independent of integrating NEPA and CERCLA into a single document. It should be stated in the text that these statutes are ARARs under CERCLA. Also state that the Endangered Species Act is addresses in the NCP 300.430 (e) (2) (i) (G) and ARARS in 300.430 (e) (9) (iii) (B). Revise the text accordingly.

p. 5, Sec. 4.2.2, par. 2, lines 6 thru 9

See comments for page 4, Sec. 4.2.1, par. 2 immediately above.

p. 5, Sec. 4.2.2, par. 3, line 3

Replace "carcinogenic and non-carcinogenic risk " by "carcinogenic risk and non-carcinogenic hazard index". Risk assessment does not result in a determination of non-carcinogenic risk.

p. 5, Sec. 4.2.3

Include a section describing the development and screening of remedial alternatives consistent with NCP 300.430 (e) (7). The initial screening step is also referenced in DOE Order 5400.4 (7) (e) with regard to NEPA/CERCLA integration. You may also reference EPA/540/G-89/004.

p. 5, Sec. 4.2.3, par. 1

Add the NCP 300.430 (e) (9) (iii) as the primary driver for detailed analysis of remedial alternatives.

Replace "analyzing alternative remediation methodologies" with "detailed analysis of alternatives".

Define threshold, primary balancing and modifying criteria per NCP 300.430 (f) (i).

p. 5, Sec. 4.2.3, par. 2, 2nd sentence

See comments for page 4, Sec. 4.2.1, par. 2.

p. 5, Sec. 4.2.3, par. 2

Add the complete list of NEPA items comprising environmental impact including the following:

- 1) direct and indirect effects
- 2) possible conflicts ...
- 3) energy requirements and conservation potential
- 4) adverse environmental effects which cannot be avoided
- 5) urban quality, historic resources

p. 6, par. 1, line 5

Replace "practical" with "possible" to be consistent with 40CFR1501.2.

p. 6, par. 2, 2nd sentence

Integration of NEPA and CERCLA/RCRA should be initiated during project scoping to be consistent with DOE Order 5400.4 and 40CFR1500.2, 40CFR1500.5(g), 40CFR1501.1 (a), and 40CFR1501.2. This sentence incorrectly states that integration should be initiated at the same time as the initial analysis of alternative remediation methodologies. Revise the text accordingly.

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- p. 6, Sec. 4.2.5 Replace "Final Action Plan (FAP)" with "Proposed Plan (PP)" to be consistent with the NCP 300.430 (f) (2).
- p. 6, Sec. 4.2.5, par. 3, last line Add "unless a significant change is made to the PP relative to the alternatives in the FS/CMS/EA of FS/CMS/EIS".
- p. 6 Include a section regarding remedial design since remedial design documents are usually required prior to implementing remedial actions. Remedial design is discussed in the NCP 300.435.
- p. 7, par. 2 Include a reference to OSWER Directive 9355.0-30 entitled "Role of the Baseline Risk Assessment in Superfund Remedy Selection Decisions", dated April 22, 1991. It states that "where the cumulative carcinogenic site risk to an individual based on reasonable maximum exposure for both current and future land use is less than 1×10^{-4} , and the non-carcinogenic hazard quotient is less than 1, action is not generally warranted unless there are adverse environmental impacts. However, if MCLs or other non-zero MCLGs are exceeded, action, generally is warranted".
- p. 7, Sec. 5.1, par. 2, 4th and 5th sentences The no action alternative is not required for an environmental assessment according to 40CFR1500-1508. It will be required by 10CFR1021.321(c) once DOE's NEPA Implementing Procedures are finalized. However, the no action alternative is required in the NCP 300.430 (e) (6). Thus, the no action alternative must be considered by CERCLA independent of NEPA. Revise the text accordingly.
- p. 7, Sec. 5.2, par. 1, last sentence The IAG, Attachment 2, VI.D., Baseline Risk Assessment, page 31, states that "in the event EPA and the State determine that a Comprehensive Risk Assessment of the Site is required, as provided for in paragraph 154 of the Agreement, DOE shall submit the Comprehensive Risk Assessment for EPA and state review and approval, in accordance with submittal schedules agreed to by EPA, the State, and DOE. Paragraph 154 of the IAG states that "if EPA and the State, in consultation with DOE, determine that a comprehensive risk assessment is necessary, as provided in the SOW, the OU specific risk assessments shall form the basis for the Comprehensive risk assessment. Thus, cumulative impacts are not overlooked by the IAG. However, the comprehensive risk assessment is not required unless EPA, the State and DOE concur. Modify the text accordingly.

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NEPA INTEGRATION INTO THE IAG

EXECUTIVE SUMMARY

This document presents the strategy proposed for use at the Department of Energy's (DOE) Rocky Flats Plant (RFP) for integrating the requirements of the National Environmental Policy Act (NEPA) with those of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) for environmental restoration activities taking place under the Department's Interagency Agreement (IAG) with the Environmental Protection Agency (EPA) and the Colorado Department of Health (CDH). The strategy consists of two broad elements. The first is preparation of an environmental impact statement (the Site-wide EIS or SWEIS) covering all proposed RFP activities over the next 5 to 10 years, including environmental restoration activities. The goals of this document, preparation of which has been initiated by the DOE, are to:

- provide complete NEPA documentation for Operable Unit (OU) 1 and as nearly-complete NEPA documentation as present information will allow on all other OUs. From this document, subsequent OU-specific environmental assessments and environmental impact statements will be tiered.
- to make NEPA concerns an integral part of the CERCLA process for judging alternative remediation plans at the earliest feasible stage while meeting NEPA public review requirements for any documents that include environmental assessments (EAs) or environmental impact statements (EISs). This goal will be reached by adding full consideration of environmental impacts to the regular CERCLA criteria used in analyzing remediation alternatives. Each type of CERCLA document is discussed, describing how NEPA concerns will be integrated into it.

The document also addresses the broader, additional elements that NEPA will bring to the CERCLA process. These include

- analysis of the environmental impacts of the overall environmental remediation program instead of simply OU-by-OU impacts,
- a better balance between the benefits of environmental cleanup and the environmental cost of cleanup,
- analysis of the cumulative impacts of the entire RFP remediation program, and
- consideration of impacts of the RFP environmental remediation program at other locations, such as sites that will receive RFP waste.

The relationships between the proposed strategy and certain other NEPA documents (e.g., programmatic EISs and categorical exclusions) and the organizational structure for preparing NEPA/CERCLA documents at RFP are described.

1 INTRODUCTION

The primary objective of this document is to confirm and document the strategy for undertaking environmental remediation actions at RFP in a manner that fully integrates the requirements of NEPA with those of CERCLA and RCRA, as required by DOE Order 5400.4. The strategy has been developed by the EG&G NEPA and Remediation Programs Divisions and must be approved by EG&G's Environmental Management (EM) Director, Associate General Manager for Environmental and Waste Management, DOE's Rocky Flats Office (DOE/RFO), DOE Headquarter's Offices of Environmental Restoration and Waste Management (EM), Environmental Guidance (EH-23), and NEPA Oversight (EH-25).

The format of documents affected by the integration of NEPA and CERCLA under the IAG must be accepted by the EPA Region VIII and CDH. The content of the documents is stipulated by CERCLA, RCRA and the Federal Facilities Compliance Agreement for Remediation (more commonly referred to as the Interagency agreement, or IAG) and its references. NEPA integration may slightly alter content, format, and the basis for alternative selection.

2 STRATEGIC APPROACH OF NEPA INTEGRATION INTO THE IAG

The DOE is currently in the procurement stage of preparing a new SWEIS for RFP. After its completion, scheduled for late 1993 or early 1994, that document will be the primary basis for meeting the requirements of NEPA at RFP. It will replace the 1980 *Final Environmental Impact Statement - Rocky Flats Plant Site*, and provide a solid base from which to tier the numerous upcoming NEPA documents for the IAG, waste management, and general plant projects.

Remediation of the plantsite is a major focus of current RFP environmental activities. The pace of remediation will steadily increase over the next 5 years and hold at that pace for the following 20 years or so. For the purposes of investigation and remediation, contaminated and potentially-contaminated sites (Individual Hazardous Substance Sites (IHSSs) or Solid Waste Management Units (SWMUs)), have been grouped into 16 Operable Units (OUs). Each OU will be taken through the RCRA/CERCLA process as outlined in the IAG.

There is some controversy over whether NEPA documentation is necessary for cleanup actions under CERCLA. EPA contends "functional equivalence" between the NEPA and CERCLA processes; that is, that the CERCLA process alone provides the equivalent information as does the NEPA process and so compliance with CERCLA automatically brings substantial compliance with NEPA. However, DOE and the President's Council of Environmental Quality (CEQ) contend that cleanup activities by an agency other than EPA (in this case by DOE) are not functionally equivalent, and therefore the NEPA process and all information it requires should be explicitly integrated into the CERCLA decision-making process. The controversy will not be laid to rest by this document. Instead, a strategy will be laid out for working within the requirements of both statutes and the regulations of the agencies involved in the most coordinated way possible. In July 1991 EPA agreed to an 18-to-24-month trial period during which it will work with CEQ and other agencies to develop single documents that will address the requirements of both CERCLA and NEPA, but that period has not yet begun.

The proposed NEPA/CERCLA integration strategy establishes an optimal approach for meeting the requirements of NEPA at RFP with no impacts to the IAG schedule. The October 1990 draft document entitled *A NEPA Compliance Strategy for the Rocky Flats Environmental Restoration Program Consistent with DOE NEPA/CERCLA Integration Policy*, presented three options for NEPA/CERCLA integration under the IAG. The strategy selected is described as Option 1 in the referenced document.

Essentially, that strategy consists of two broad elements. The first element is to base NEPA/CERCLA integration on preparation of the SWEIS as the comprehensive, lead NEPA document from which subsequent, OU-specific, integrated NEPA/CERCLA documents can be tiered. The "proposed action" in the SWEIS will incorporate program-level elements of the environmental restoration (ER) program, to the extent they are known at the time the SWEIS is prepared. The SWEIS will necessarily cover a broad range of topics, so particular attention will have to be paid to ensure that ER activities are described in sufficient detail to provide an adequate basis for tiering. This element of the strategy is entirely consistent with DOE's NEPA Pyramid in which the Programmatic EIS (PEIS) is at the tip of the pyramid, SWEIS in the middle of the pyramid tiered from the PEIS, and project-specific integrated NEPA/CERCLA documents, as appropriate, tiered from the SWEIS at the bottom of the pyramid.

The second element of the strategy is to make NEPA concerns an integral part of the CERCLA process for judging alternatives by, at the earliest feasible stage, adding full consideration of environmental impacts to the regular CERCLA criteria used in analyzing alternative remediation methodologies and meeting the public review requirements of NEPA. The two elements form an approach to the integration of NEPA and CERCLA requirements that is consistent with, and supportive of, the November 15, 1991, "Guidance on Implementation of the DOE NEPA/CERCLA Integration Policy" from EH-20.

3 SWEIS AS THE LEAD NEPA DOCUMENT

The primary document establishing NEPA compliance at RFP will be the SWEIS which is in the early stages of development by DOE. The Notice of Intent has been published in the *Federal Register*, and scoping meetings have been held. DOE/RFO is writing the Implementation Plan. The SWEIS will identify the impacts and risks associated with RFP projects scheduled to occur during the next 5 to 10 years. The ER Program will be a key part of that document, even though specific remedial actions have not been selected for all OUs. The SWEIS is expected to provide NEPA documentation for OU 1 and, possibly, one or two other OUs. Insufficient information exists to permit detailed discussion of planned remediation activities at other OUs. However, the details that are available will be discussed. It is presently anticipated that the SWEIS may present a description of the expected "worst-case scenario" of any environmental impact within which total, cumulative environmental impacts of the ER program are expected to fall. It is anticipated that EAs or supplemental EISs on remediation of later OUs will be tiered from the SWEIS.

EG&G has subcontracted preparation of a technical support document which will contain all information relevant to the ER program as a basis for discussion about the program in the SWEIS. The technical support document will be more detailed than required for the EIS, and will provide all necessary references for the EIS concerning the IAG and the remediation program. The technical support document will be provided to the DOE SWEIS contractor so that the appropriate level of detail may then be incorporated into the EIS.

The SWEIS is scheduled for completion in late 1993. If that schedule is adhered to, which is uncertain at this time, the only remediation projects to proceed before its completion would be the interim actions at OUs 1 and 2. Environmental assessments are being, or have been, written on these activities. NEPA documentation for the interim action at OU 1 is in *Environmental Assessment for 881 Hillside (High Priority Sites) Interim Remedial Action* (DOE/EA-0413) which is separate from its feasibility study or interim remedial action plan. The *Surface Water Interim Measures/Interim Remedial Action Plan/Environmental Assessment* (DOE/EA-0496) and *Decision Document - South Walnut Creek Basin, OU 2* addresses remedial activities in the South Walnut Creek Basin at OU 2 in a document that partially integrates NEPA and CERCLA concerns. In response to EPA and CDH comments on that document, the format of the next document, the as-yet-untitled IM/IRAP/EA for the interim action in the Woman Creek Basin at OU 2,

has been modified to more fully integrate evaluation criteria from the two statutes. If the SWEIS is not completed by late 1993, it may be necessary to prepare separate NEPA documentation for the OU 1 final action.

4 INTEGRATION OF NEPA CONCERNS INTO CERCLA DOCUMENTS

The second element in RFP's overall NEPA/CERCLA integration strategy is the inclusion of NEPA concerns into the processing of, and the analysis of alternatives under, various CERCLA documents.

4.1 Documents Related To Interim Actions

Interim actions are typically remedial activities implemented prior to a final action. They are usually undertaken where some or all of a contaminated site requires early remedial action before a final action can be developed and implemented, such as to prevent the migration of contamination. Interim actions are characteristically smaller, less expensive and less comprehensive than final actions, and may constitute a more easily-implemented part of a broader final action.

4.1.1 Interim Remedial Action Plan (IRAP)

CERCLA requires an IRAP for those OUs at which an interim action is necessary. The IRAP, in effect, condenses the various documents required for a final action into a single document describing the nature and extent of contamination at a site, analyzing alternative remediation technologies and selecting a technology to implement.

CERCLA calls for each alternative interim measure to be analyzed against three criteria: effectiveness, implementability and cost. Integration of NEPA will be accomplished by adding a fourth criteria: environmental impact. This ensures:

- inclusion of NEPA concerns in the decision-making process on interim actions at the earliest feasible time, and
- weighing of NEPA concerns on the same basis as the other criteria.

Integrating the requirements of NEPA into an IRAP makes the document an IRAP/EA.

4.2 Documents Related to Final Actions

4.2.1 Remedial Investigation (RI) Work Plan

Work plans are typically the first step in identifying the "nature and extent of contamination" as a basis for further action. They are required under CERCLA and are milestones under the IAG. They provide a detailed description of work to be performed in order to fully describe and characterize the nature and extent of contamination at an OU and to identify impacts to human health and the natural environment. Each work plan must be approved by EPA and CDH.

Typically, NEPA would not require a work plan to include any additional sampling, data collection or analysis beyond what is required by EPA CERCLA guidance. It is possible, though, that some additional field work may be needed in areas of particular interest under NEPA such as threatened or endangered plant and animal species, floodplain, wetlands, and cultural sites. Integration of NEPA and CERCLA would have very little, if any, impacts on RI work plans.

4.2.2 RI Report

The RI Report presents the results of implementing the Work Plan and consists of two sections. The first includes data, analyses of field work, and a description of the nature and extent of contamination.

The second section is a baseline (i.e., without cleanup) risk assessment with two subsections. The first subsection is an environmental evaluation, describing impacts, if any, to the natural environment resulting from the contamination if no cleanup action is instigated. Environmental evaluations at RFP will use an ecosystems approach to identify overall affects of contamination, as well as looking at community and population levels of organization. Both CERCLA and NEPA mandate investigation of environmental effects. However, NEPA also requires consideration of "sensitive areas" such as floodplains, wetlands and cultural sites as well as threatened or endangered plants and animals or their habitats, and "critical" habitats that might be affected by contamination. These NEPA concerns might require some additional field work, but will not have any significant effects on development of the environmental evaluation.

The second subsection of the baseline risk assessment is a human health risk assessment. This includes contaminant identification, exposure assessment, toxicity assessment and risk characterization and leads to quantification of the carcinogenic and non-carcinogenic risks to human health from the contamination if no clean-up action is taken.

Each of these elements is a required part of the CERCLA process. Little additional analysis in these areas is required by NEPA. Thus, integration of NEPA will have little effect on preparation of the RI report.

4.2.3 Feasibility Study (FS)

The FS identifies alternative means of remediating a site, based on the results of the RI report, and implements an analytical comparison of those alternatives. Under EPA CERCLA guidance (*Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA*, EPA/540/G-89/004), an FS must use nine criteria in analyzing alternative remediation methodologies:

1. Overall protection of human health and the environment
2. Compliance with applicable and relevant or appropriate requirements (ARARs)
3. Long-term effectiveness and permanence
4. Reduction of toxicity, mobility and volume through treatment
5. Short-term effectiveness
6. Implementability
7. Cost
8. State acceptance
9. Community acceptance

One of the elements of the "short-term effectiveness" criterion is "environmental impacts", so general environmental impacts of each alternative remediation methodology are analyzed under CERCLA. NEPA, in addition to generally analyzing environmental impacts, has certain areas of special interest. As indicated in the discussion about environmental evaluations, some areas of special interest are impacts to threatened or endangered species and habitats, floodplains, wetlands and cultural sites. Other special concerns of NEPA are adverse environmental impacts which cannot be avoided, the relationship between short-term and long-term productivity of the land, and irreversible and irretrievable commitments of resources. The FS will be supplemented to provide any additional information required by NEPA. Therefore it will appropriately be titled FS/EA or FS/EIS.

The goal is not to have a document that simply contains both CERCLA and NEPA information between its covers. Rather it is to weave the concerns of, and information required by, NEPA into the fabric of the CERCLA process so that the evaluation and selection of remediation alternatives meets the requirements of both statutes. The primary NEPA requirement is that NEPA concerns be taken into account at the earliest practical stage in the decision-making process. DOE has identified the FS as the appropriate stage to introduce NEPA concerns into the analysis of remediation alternatives.

It is important to note that, while an FS has its origins in the RI report, preparation of an FS may overlap preparation of the RI report as long as the RI report is completed prior to the draft FS. Thus, integration of NEPA does not need to await completion of the RI report, but should be initiated at the same time as the initial analysis of alternative remediation technologies, whether such analysis is to be included in the RI report or the FS. All alternatives are to be analyzed against both CERCLA and NEPA criteria in a unified analysis; application of NEPA criteria should neither be delayed nor applied only to the preferred alternative.

4.2.4 Treatability Studies

The IAG stipulates that treatability studies addressing the various wastes and waste matrices present at RFP be conducted as one of the initial projects of the remedial process. Treatability studies will involve extensive literature searches, bench-scale studies and, most likely, pilot-scale studies.

At this time, DOE requires an EA for treatability studies. However, proposed categorical exclusions (CXs) include an exclusion for treatability studies. Preparation of NEPA documentation for treatability studies called for under the IAG (whether a CX or an EA), will be undertaken in a way that will have no effect on such studies or IAG-schedules.

4.2.5 Final Action Plan (FAP)

A FAP describes how DOE proposes to remediate a site and is based on the results of the FS and any treatability studies that may have been done. The draft FAP is submitted to EPA and CDH with the final FS/EA.

EPA and CDH have 4 weeks to review and comment on the final FAP. An additional 8 weeks are allowed to resolve issues and finalize the FAP. The agencies then have a week to review the final document before the 8 week public comment period commences. Field work typically does not begin for several months after FAP approval because of the time needed to complete engineering drawings and other technical details as well as the procurement process.

Because the required NEPA analysis of alternatives is in the FS/EA, no additional NEPA documentation will be required for the FAP.

4.2.6 Findings of No Significant Impact (FONSI)

FONSIs on FS/EAs will be issued by DOE as appropriate and will be available for public comment at the same time as the final FAP and should be of same or similar content. A FONSI is a document unique to NEPA and would not otherwise be required under CERCLA. Issuance of a FONSI will have no effect on any aspect of work under the IAG.

5 NEPA CONTRIBUTIONS TO ACTIVITIES UNDER THE IAG

Integration of NEPA into CERCLA activities under the IAG will bring important qualities to the analysis of remediation alternatives. They are:

5.1 Better balance between the benefits of environmental clean-up and its impacts.

CERCLA has a bias toward initiating remediation projects. The goal of NEPA is to fully inform decision-makers of the environmental impacts of the alternatives from which they must choose. An implied goal of NEPA is to minimize environmental impacts when an action is taken. Inclusion of NEPA considerations in IAG activities will assist decision makers in balancing the trade-offs between the benefits of cleaning-up a site and the environmental damage such cleanup might entail.

Under CERCLA, the decision about whether or not to remediate is essentially made at the end of the RI process. If a site presents health risks above certain levels, or evidence of continuing environmental degradation, remediation is called for without regard for whether the human health and environmental costs are greater than the benefits of remediation. In fact, the initial decision to remediate in the RI report can be made before any remediation alternatives are analyzed or even developed in the FS. Inclusion of NEPA requirements in the analysis of alternatives brings with it continued consideration of the "no action" alternative. It is this crucial factor that forces analysis of the environmental costs of alternatives, including doing nothing, so that a remediation action does not result in a net loss to the environment. The document "Integration of NEPA Values into CERCLA Documents" recognizes the importance of including this and other NEPA concerns in the CERCLA process.

5.2 Analysis of the cumulative impacts of the entire RFP remediation program will be considered.

Grouping the IHSSs into OUs makes the process more manageable than attacking the entire Rocky Flats plantsite as one unit. Each OU is addressed separately for investigation, and remedy development and implementing. However, NEPA does not permit a project or program to be divided into smaller units when considering impacts because such an approach can mask the true size of total impacts. In some fashion, the cumulative impacts of the entire RFP remediation program must be considered in the decision-making process. Assessment of cumulative impacts is explicitly required by NEPA, and is overlooked by the CERCLA process and the IAG.

The SWEIS will assess, to the extent possible, cumulative impacts of remediating the 16 OUs based on information available at the time. Due to the long time frame of the remediation program, at the time the SWEIS is prepared, very few details will be known about some of the later OUs. As indicated above, some of the analysis of cumulative impacts may have to rely on an "outer bounds" analysis. With careful planning, that part of the SWEIS describing RFP's environmental restoration program will adequately describe or bound the environmental impacts of the restoration program and provide sufficient NEPA documentation for all IAG activities that follow.

Some IAG activities requiring NEPA documentation will precede completion of the SWEIS. Final EAs have already been prepared for IM/IRAs at OU 1 and in the South Walnut Creek basin of OU 2. A draft EA has been prepared for the IM/IRA in the Woman Creek basin of OU 2. The final draft of this document, and any subsequent EA on an IAG action prepared prior to the final draft of the SWEIS, will include a cumulative impacts section that describes the impacts of the proposed action and all IAG actions that preceded it. EAs prepared after the final draft of the SWEIS will rely on the SWEIS to document cumulative impacts unless the proposed action or other conditions make that reliance inappropriate.

5.3 Analysis of Impacts at Other Locations.

For example, shipping contaminated soil from Rocky Flats to a disposal site elsewhere would solve a problem at Rocky Flats, but create another one at the receiving location. Under NEPA, this type of impact will be considered and analyzed.

5.4 Addition of Public Scoping to the CERCLA Process

Though CERCLA has provisions for public review, it does not have a formal process allowing early public comment on the issues and concerns to be addressed in the various documents. NEPA will bring such a process to activities under the IAG in the case of EISs and major EAs.

6 RELATIONSHIP TO OTHER NEPA DOCUMENTS

6.1 Programmatic EISs

The Defense Programs (DP) and Environmental Restoration/Waste Management (ER/WM) branches of DOE are engaged in separate programmatic environmental impact statements (PEISs) for which a single record of decision may be issued. The DP PEIS will identify and analyze alternatives for the future configuration of the DOE complex. Identification of the preferred alternative in that document will indicate whether Rocky Flats will continue to be the site for production of plutonium components for nuclear warheads or if that function will be relocated.

The preferred alternative to be developed for the DP PEIS will have major implications for the functions of ER/WM, and the topics to be addressed in the ER/WM PEIS. Decontaminating and decommissioning RFP and recovering residues presently on the site and possibly not transportable, are the most obvious of these topics.

6.2 Categorical Exclusions

Certain activities are excluded from further documentation under NEPA by categorical exclusions (CXs) that have been adopted by DOE and published in the *Federal Register*. The list of CXs is expected to be amended in the coming months, significantly increasing the number of actions that can be categorically excluded from further NEPA documentation.

The CX for "removal actions" (55 FR 37178) has the potential to allow the exclusion from NEPA documentation of a variety of remedial actions. A section of that CX excludes "treatment (including incineration), recovery, storage, or disposal of wastes at existing facilities permitted for the types of wastes resulting from the removal action, where needed to reduce the likelihood of human, animal, or food chain exposure". This exclusion could cover numerous cleanup actions under the IAG.

The extensive site characterization that will be required for the RIs, including drilling wells to sample geologic formations and water at various depths, and gathering samples of flora and fauna, are already covered by categorical exclusion. Treatability studies presently require an EA. As mentioned above, however, DOE has proposed a CX that would cover treatability studies.

Preparation of CXs will not affect the IAG schedule. If DOE adopts additional CXs, some EAs now called for in the IAG might be replaced by CXs. Since the processing time for CXs is shorter than that for EAs, IAG schedules could be favorably affected.

7 ORGANIZATIONAL STRUCTURE FOR PREPARING NEPA/CERCLA DOCUMENTS UNDER THE IAG

7.1 EG&G Organization

With the exception of EISs, the types of documents that are the subject of this strategy (see Section 4) will be generated by the Environmental and Waste Management (E&WM) Directorate of EG&G. Some of these documents will be prepared by EG&G staff, others by subcontractors. All will be initiated in accordance with the IAG schedule.

Remediation Programs Division (RPD) of E&WM generally will initiate preparation of RI work plans and, in coordination with the NEPA Division, RI reports. Feasibility study/EAs, treatability studies, final action plans, and IRAPs, will typically be prepared by subcontractors under the direction of the RPD. The NEPA Division will be involved in the preparation of statements of work for these documents to ensure that they include the necessary NEPA-related requirements. The NEPA Division will generally prepare CXs and FONSIs. Preparation of the SWEIS and PEISs will remain the responsibility of DOE. It is unclear at this time whether DOE or EG&G would have responsibility for preparing any OU-specific EISs that might be required after the SWEIS is completed.

7.2 DOE Organization

DOE/RFO oversees EG&G activities at RFP. As indicated above, preparation of most documents called for under the IAG, and most other NEPA documents, will be initiated by EG&G on approval from DOE/RFO in accordance with the applicable schedule. DOE/RFO will review and comment on draft documents before they are submitted to DOE/HQ. DOE/HQ will review and comment on documents before they are submitted to EPA and CDH and/or the public for comment.

7.3 Role of DOE/HQ in IAG Documents

For a typical IAG deliverable, EG&G will conduct an initial review when the document is completed by EG&G or subcontractor staff. The document will be returned to the preparer for responses to comments. Subsequently, the revised document will be transmitted to DOE/RFO for its review and comment, and those comments will be responded to in the document. After this second round of comments, the document will be submitted to DOE/HQ for further review before submittal to EPA and CDH as a draft. If the document is an EA, there will then be a public comment. After agency review and public comment, the document will again be reviewed and revised as necessary either by the preparer or EG&G, submitted to DOE/RFO, revised if necessary, submitted to DOE/HQ and revised if necessary, and finally resubmitted to the agencies and public as a final document.

DOE/HQ will retain control of preparation of the SWEIS and the PEISs. In addition, it will review draft and final IAG documents as described above.